

DOCKET NO.: NNI-0006

PATENT



In Re Application of:

Mark Edward Riehl, et al.

Group Art Unit: 3764 Application No.: 10/729,243

Filing Date: December 5, 2003

Examiner: Not Yet Assigned

Confirmation No.: 1171

REDUCING DISCOMFORT CAUSED BY ELECTRICAL STIMULATION

DATE OF DEPOSIT:

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID, ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE UNITED STATES PATENT AND TRADEMARK OFFICE, P.O. BOX 1450, ALEXANDRIA,

11/19/04

VA 22313-14**5**0

TYPED NAME: Vincent J. Roccia REGISTRATION NO.: 43,887

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

In accordance with § 1.97(b), since this Information Disclosure Statement is \boxtimes being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of

	and the second s
	the above identified application as set forth in § 1.491, before the mailing date
	of a first Office Action on the merits of the above-identified application, or
	before the mailing date of a first Office Action after the filing of request for
	continued examination under § 1.114, no additional fee is required.
	In accordance with § 1.97(c), this Information Disclosure Statement is being
	filed after the period set forth in § 1.97(b) above but before the mailing date of
	either a Final Action under § 1.116 or a Notice of Allowance under § 1.311, or
	before an action that otherwise closes prosecution in the application, therefore:
	Certification in Accordance with § 1.97(e) is attached; or
	The fee of $$180.00$ as set forth in § 1.17(p) is attached.
	In accordance with § 1.97(d), this Information Disclosure Statement is being
	filed after the mailing date of either a Final Action under § 1.113 or a Notice
	of Allowance under § 1.311 but before, or simultaneously with, the payment
	of the Issue Fee, therefore included are: Certification in Accordance with §
	1.97(e); and the submission fee of <u>\$180.00</u> as set forth in § 1.17(p).
\boxtimes	Copies of reference numbers 1 thru 22, 33 thru 37, 48 thru 52, 63 thru 67,
	78 thru 82, 93,94 listed on the attached Form PTO-1449 are enclosed
	herewith.
\boxtimes	Copies of reference numbers 23 thru 32, 38 thru 47, 53 thru 62, 68 thru 77,
	83 thru 92, 95 thru 100 on the attached Form PTO 1449 are not required to
	be submitted pursuant to 37 CFR § 1.98(a)(2)(i).
	Copies of references - are not being submitted because
	they were previously cited by or submitted to the U.S. Patent and
	Trademark Office in patent application number , filed for

which a claim for priority under 35 U.S.C. § 120 has been made in the instant application.

There are no listed references which are not in the English language.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-

3050. This form is submitted in duplicate.

Date:

11/19/04

Vincent J. Roccia

Registration No. 43,887

WOODCOCK WASHBURN LLP One Liberty Place - 46th Floor

Philadelphia, PA 19103 Telephone: (215) 568-3100

Facsimile: (215) 568-3439

© 2004 WW



& TRADEMI						
Form PTO	-1449 Modified	Docket No. NNI-0006	Application No. 10/729,243			
Cited b	t and Publications by Applicant sheets if necessary)	Applicant Mark Edward Riehl, et al.				
U.S. Departm Patent and T	nent of Commerce Frademark Office	Filing Date December 5, 2003	Group 3764			
•		Confirmation No. 1171				
OTHE	R DOCUMENTS (Inclu	ding Author, Title, Date	e, Pertinent Pages, Etc.)			
1	Baudewig, J. et al., "Fur	nctional MRI of Cortical	Activations Induced by Transcranial			
	Magnetic Stimulation(T	MS)", Brain Imaging-Ne	euroReport, 2001, 12(16), 3543-3548			
2	Bohning, D.E. et al., "A	TMS Coil Positioning/F	Holding System for MR Image-			
	Guided TMS Interleave 2219	d with fMRI", Clinical N	Ieurophysiology, 2003, 114, 2210-			
3	Bohning D.E. Ph.D. et	al "A Combined TMS/1	MRI Study of Intensity-Dependant			
	TMS over Motor Corte	ex", Society of Biological Psychiatry, 1999, 45, 385-394				
4	Bohning, D.E. Ph.D. et	al., "BOLD-fMRI Respo	nse to Single-Pulse Transcranial			
	Magnetic Stimulation ((TMS)", Journal of Magnetic Resonance Imaging, 2000, 11,				
	569-574	, "Modest Adjunctive Benefit with Transcranial Magnetic				
5	Garcia-Toro, M. et al.,	Modest Adjunctive Ben	" Journal of Affective Disorders			
	2001 , 64, 271-275	ation-Resistant Depression", Journal of Affective Disorders,				
6	George M S et al "A	A Controlled Trial of Daily Left Prefrontal Cortex TMS for				
0	Treating Depression", S	, Society of Biological Psychiatry, 2000, 48, 962-970				
7	George, M.S. "New Me	thods of Minimally Inva	sive Brain Modulation as Therapies			
	in Psychiatry: TMS,MS	T,VNS and DBS", Chin	ese Medical Journal (Taipei), 2002,			
	65, 349-360					
8	Grafman, J. Ph.D., "TM	IS as a Primary Brain Ma	apping Tool" Transcranial Magnetic			
	Stimulation in Neurops	ychiatry, 2000, 115-140	tis Ctimulation/TMC) Treatment			
9	Nahas, Z.et al., "Left Pr	retrontal Transcranial Ma	agnetic Stimulation(TMS) Treatment			
	of Depression in Bipola	or Affective Disorder: A	Pilot Study of Acute Safety and			
10	Efficacy", Bipolar Disc	1 "Magnetic Seizure Th	erapy of Major Depression", Arch			
10	Gen Psychiatry, 2001,	58, 303-307				
11	Lisanby S.H. et al. "S	ham TMS: Intracerebral	Measurement of the Induced			
	Electrical Field and the	Induction of Motor-Evo	ked Potentials", Society of Biological			
	Psychiatry, 2001, 49, 4	60-463				
EXAMINER		DATE CO	ONSIDERED			
EXAMINER	1 3 90111411 9, 2001, 12, 1		ONSIDERED			

			1			
Form P	TO-	-1449 Modified	Docket No. NNI-0006		Application No. 10/729,243	
Ci	List of Patent and Publications Cited by Applicant (Use several sheets if necessary)			Applicant Mark Edward Riehl, et al.		
		nent of Commerce Frademark Office	Filing Date December		Group 3764	
			Confirmation 1171	on No.		
ОТ	THER	R DOCUMENTS (Includ				
	12	Depression: Randomized Therapy", <i>Neuropsychop</i>	d Within-Sub	ject Compara	Seizure Therapy(MST) in Major sion with Electroconvulsive State Psychiatric Institute, 2003,	
	13	Therapy", The Journal o	of ECT, 2002	18 , 18, 182-188	py: A Novel Form of Convulsive	
	14	Lorberbaum, J.P., M.D. Stimulation in Neuropsys	et al., "Safety echiatry, 2000	y Concerns of), 141-161	TMS", Transcranial Magnetic	
	15	Studies: Are Some "Shar 47, 325-331	m" Forms Ac	ctive?", <i>Socie</i>	on (TMS) in Controlled Treatment ty of Biological Psychiatry, 2000,	
	16	Nahas, Z. et al., "Unilateral Left Prefrontal Transcranial Magnetic Stimulation(TM Produces Intensity-Dependent Bilateral Effects as Measured by Interleaved BOLD fMRI", Society of Biological Psychiatry, 2001, 50, 712-720				
	17	Pridmore, S., "Substituti	ion of Rapid ' herapy Treatn	Transcranial I nents in a Co	Magnetic Stimulation Treatments urse of Electroconvulsive	
	18	Roth, Y. et al., "A Coil I Regions". Journal of Cla	Design for Tr inical Neurop	ranscranial Machysiology, 20	agnetic Stimulation of Deep Brain 002, 19(4), 361-370	
	19	Ruohonen, J., "Electroen Helsinki University Cen	ncephalograp ntral Hospital,	ohy Combined,	with TMS", BioMag Laboratory, October 6, 1999, 22 pages	
	20	Terrace, H.S. et al., "The Magnetic Seizure Thera Viewer and Itinerary Pla	e Cognitive E apy in Rhesus Janner, 2002,	Effects of Election Monkeys", S ABSTRACT	ctroconvulsive Shock and lociety for Neuroscience Abstract ONLY # 184.14	
	21	Terrace, H.S. et al., "The	e Cognitive E herapy in Rh	Effects of Elections Effects Monkeys	ctroconvulsive Shock Stimulation s", Society for Neuroscience	
	22	Trivedi, M.H., MD., "Trivedi,	reatment-Res	sistant Depres	sion: New Therapies on the (1), 59-70	
EXAMINER				DATE CON		

FACIN P I ()-1449 MOUNICU				Docket No. NNI-0006	Application No 10/729,243).	
	Cite	atent and Publications ed by Applicant ral sheets if necessary		Applicant Mark Edward Riehl, et al.			
		artment of Commerce nd Trademark Office	;	Filing Date Group December 5, 2003 3764			
				Confirmation No. 1171			
		U. S	S. PATENT	DOCUMENTS			
Examiner Initial		Document No.	Date	Name	Class	Subclass	
	23	6,402,678 B1	06/11/02	Fischell, et al.	600	13	
	24	5,116,304	05/26/92	Cadwell	600	13	
	25	4,994,015	02/19/91	Cadwell	600	13	
	26	6,179,771 B1	01/30/01	Mueller	600	13	
	27	6,179,769 B1	01/30/01	Ishikawa, et al.	600	9	
	28	2001/0031906 A1	10/18/01	Ishikawa, et al.	600	13	
	29	2002/0087201 A1	07/04/02	Firlik, et al.	607	45	
	30	2002/0103515 A1	08/01/02	Davey, et al.	607	66	
	31	5,078,674	01/07/92	Cadwell	600	13	
	32	2003/0130706 A1	07/10/03	Sheffield, et al.	607	46	
		FORE	IGN PATI	ENT DOCUMENTS			
Examiner		Document No.	Date	Country	Tra YES	nslation NO	
Initial	33	WO 02/032504 A2	04/25/02	PCT	165	110	
	34	WO 02/094997 A2	11/28/02	PCT			
, , , , , , , , , , , , , , , , , , , ,	35	WO 02/085449 A2	10/31/02	PCT			
	36	WO 02/09811 A1	02/07/02	PCT			
	37	EP 1 273 320 A1	01/08/03	EPO			
EXAMINER				DATE CONSIDERI	ED		

			Docket No. Application No. 10/729,243				
(Use several sheets if necessary) U.S. Department of Commerce				Applicant Mark Edward Riehl, et al.			
				Group 3764			
			Confirmation No. 1171				
	U. S	S. PATENT	DOCUMENTS				
	Document No.	Date	Name	Class	Subclass		
38	2002/0091419 A1	07/11/02	Firlik, et al.	607	45		
39	2003/0004392 A1	01/02/03	Tanner, et al.	600	9		
40	2003/0023159 A1	01/30/03	Tanner	600	417		
41	2003/0028072 A1	02/06/03	Fischell, et al.	600	13		
42	2003/0088274 A1	05/08/03	Gliner, et al.	607	3		
43	2003/0097161 A1	05/22/03	Firlik, et al.	607	72		
44	6,198,958 B1	03/06/01	Ives, et al.	600	411		
45	2003/0195588 A1	10/16/03	Fischell, et al.	670	55		
46	2003/0204135 A1	10/30/03	Bystritsky	600	407		
47	6,663,556 B2	12/16/03	Barker	600	14		
· · · · · · · · · · · · · · · · · · ·	FORE	IGN PATI	ENT DOCUMENTS				
		_			anslation		
40				YES	NO		
52	WO 02/085454 AT	10/31/02		PD.			
	38 39 40 41 42 43 44 45 46	U. S Document No. 38 2002/0091419 A1 39 2003/0004392 A1 40 2003/0023159 A1 41 2003/0028072 A1 42 2003/0088274 A1 43 2003/0097161 A1 44 6,198,958 B1 45 2003/0195588 A1 46 2003/0204135 A1 47 6,663,556 B2 FORE Document No. 48 WO 02/089902 A2 49 WO 03/035163 A2 50 WO 01/97906 A2 51 WO 99/64884	U. S. PATENT Document No. Date	Document No. Date Name No. No. Date Name No. Name No. Name No. Name Name	Document No. Date Name Class		

EXAMINE	R			DATE CONSIDERI	E D		
	67	WO 00/74777	12/14/00	PCT			
	66	WO 01/28622 A2	04/26/01	PCT			
	65	WO 02/31604 A1	04/18/02	PCT			
	64	WO 01/12236 A2	02/22/01	PCT			
	63	WO 02/072194 A2	09/19/02	PCT			
examiner Initial		Document No.	Date	Country	YES	NO	
Examiner	1	FORE	IGN PATE	ENT DOCUMENTS	Tra	nslation	
	62	6,488,617 B1	12/03/02			120	
	61	6,256,531 B1		Katz	600	26	
	60	6,560,490 B2	07/03/01	Ilmoniemi, et al.	600	544	
	59	6,516,288 B2	05/06/03	Bagne Grill, et al.	607	72	
	58	2003/0073899 A1	02/04/03		702	179	
	57	6,571,123 B2	04/17/03	Ruohonen, et al.	600	417	
	56	6,463,328 B1	10/08/02 05/27/03	Ives, et al.	600	544	
	55	6,484,059 B2	11/19/02	John	607	45	
	54	6,503,187 B1	01/07/03	Ilmoniemi, et al. Gielen	607	45	
	53	2004/0010177 A1	01/15/04	Rohan, et al.	600	14	
Examiner nitial		No.	Date	Name	Class 600	Subclass 9	
	1	U. S Document	S. PATENT	DOCUMENTS		T	
				Confirmation No. 1171			
U.S . Pa	. Depa	artment of Commerce nd Trademark Office		Filing Date December 5, 2003	Group 3764		
CHEGOV ADDINATION I				Applicant Mark Edward Riehl, et al.			
HARM PICE-1449 MOUNTEU				Docket No. NNI-0006	Application No 10/729,243).	

For	rm P	ΓO-1449 Modified	,	Docket No. NNI-0006	Application No 10/729,243	O
(Use several sheets if necessary) U.S. Department of Commerce				Applicant Mark Edward Riehl, et al.		
				Filing Date December 5, 2003	Group 3764	p
				Confirmation No. 1171		
		U. S	S. PATENT	DOCUMENTS		
Examiner Initial		Document No.	Date	Name	Class	Subclass
	68	6,366,814 B1	04/02/02	Boveja, et al.	607	45
	69	6,253,109 B1	06/26/01	Gielen	607	45
	70	6,117,066	09/12/00	Abrams, et al.	600	14
	71	5,707,334	01/13/98	Young	600	9
	72	4,712,558	12/15/87	Kidd, et al.	128	421
	73	6,066,084	05/23/00	Edrich, et al.	600	13
	74	6,567,702 B1	05/20/03	Nekhendzy, et al.	607	46
	75	2002/0013612 A1	01/31/02	Whitehurst	607	45
	76	2002/0169355 A1	11/14/02	Rohan, et al.	600	9
	77	2003/0050527 A1	03/13/03	Fox, et al.	600	13
	<u></u>	FORE	IGN PATI	ENT DOCUMENTS		
Examiner			_			nslation
Initial		Document No.	Date	Country	YES	NO
	78	WO 03/090604 A2	11/06/03	PCT		
	79	WO 03/098268 A1	11/27/03	PCT		
	80	WO 03/084605 A1	10/16/03	PCT		
	81	WO 03/085546 A1	10/16/03	PCT		
	82	WO 03/039468 A2	05/15/03	PCT		
EXAMINE	R			DATE CONSIDERED		

Form PTO-1449 Modified				Docket No. NNI-0006	Application No. 10/729,243	o. 	
	Cit	atent and Publications ed by Applicant ral sheets if necessary		Applicant Mark Edward Riehl, et al.			
U.S. Department of Commerce Patent and Trademark Office				Filing Date Group December 5, 2003 3764			
				Confirmation No. 1171			
	<u>-</u>	U. S	S. PATENT	DOCUMENTS			
Examiner Initial		Document No.	Date	Name	Class	Subclass	
	83	6,572,528 B2	06/03/03	Rohan, et al.	600	14	
	84	2003/0074032 A1	04/17/03	Gliner, et al.	607	45	
	85	2003/0125786 A1	07/03/03	Gliner, et al.	607	116	
.,	86	5,813,970	09/29/98	Abrams, et al.	600	14	
	87	5,769,778	06/23/98	Abrams, et al.	600	14	
-	88	6,169,963 B1	01/02/01	Markov	702	57	
	89	2002/0160436 A1	10/31/02	Markov, et al.	435	15	
	90	2002/0123780 A1	09/05/02	Grill, et al.	607	72	
	91	4,995,395	02/26/91	Ilmoniemi, et al.	128	653	
	92	6,537,197 B1	03/25/03	Ruohonen, et al.	600	13	
	•	FORE	IGN PATI	ENT DOCUMENTS			
Examiner		Decree No	Data	Country	Tra YES	anslation NO	
Initial	93	Document No. WO 03/082405 A1	Date 10/09/03	PCT	ILS	110	
	94	WO 2004/006750 A2	01/22/04	PCT			
EXAMINE	R			DATE CONSIDER	ED		

List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office				Docket No. Application No. 10/729,243			
				Applicant Mark Edward Riehl, et al.			
				Filing Date Group December 5, 2003 3764			
				Confirmation No. 1171			
		U. S	S. PATENT	T DOCUMENTS			
Examiner Initial		Document No.	Date	Name	Class	Subclass	
	95	6,155,966	12/05/00	Parker	600	13	
	96	6,057,373	05/02/00	Fogel	514	740	
	97	2003/0087264 A1	05/08/03	Kaplitt, et al.	435	6	
	98	2003/0082507 A1	05/01/03	Stypulkowski	434	262	
	99	2004/0138550 A1	07/15/04	Hartlep, et al.	600	407	
	100	2004/0143300 A1	07/22/04	Rogers	607	45	
		FORE	IGN PATI	ENT DOCUMENTS		<u> </u>	
Examiner		_				nslation	
Initial		Document No.	Date	Country	YES	NO	
EXAMINE	R			DATE CONSIDER	ED		